

AMENDMENTS TO THE SPECIFICATION

Please delete the present Abstract of the Disclosure and replace it with the following new Abstract of the Disclosure.

A laser radar scanningly irradiates electromagnetic waves around a subject vehicle detects the electromagnetic waves reflected from objects around the subject vehicle, and outputs detected distances from the subject vehicle to the objects in the respective directions of scanning irradiation. A recognition unit detects, based on the detection results of the laser radar, a relative position and a relative speed of each of the objects around the subject vehicle with respect to the subject vehicle. The recognition unit stores whether or not detection points data (i.e., a direction of scanning irradiation and a detected distance in that direction) exists and determines attributes such as positions, sizes, etc., of the objects lying around the subject vehicle. In coordination with the recognition unit, an object tracker calculates relative speeds as between the vehicle and detected objects, with particular reference to objects exhibiting a greater difference in relative speed over time.